

ABSTRACT

COMPARATIVE STUDY OF EFFECTIVENESS OF VIA/VILI, PAP SMEAR, COLPOSCOPY FOR SCREENING OF CANCER CERVIX WITH HISTOPATHOLOGY AS GOLD STANDARD

Aim of this study is To compare the effectiveness of visual inspection with acetic acid/ lugols iodine , pap smear and colposcopy for screening of cancer cervix, To study the correlation between findings of VIA/VILI, PAP smear & colposcopy with histopathology , To compare the sensitivity, specificity ,diagnostic accuracy of VIA/VILI,PAP smear & colposcopy.

This was a hospital based prospective study conducted On 100 patients at Dept of Obstetrics and Gynaecology, Govt Theni Medical College and Hospital, Theni .

TYPE OF STUDY: A prospective observational study on women of reproductive age group.

DURATION OF STUDY: August 2014-july 2015

INCLUSION CRITERIA

Sexually active women of reproductive age group, non-pregnant women, Both nulliparous and multiparous, women attending gynecology OPD

EXCLUSION CRITERIA

Pregnant women, Severe ill health, postpartum until 12 wks, overt growth in cervix, previous treatment for cancerous lesions, allergy to acetic acid and iodine, who had undergone hysterectomy, women on hormonal therapy, women below 20yrs and above 45yrs of age, women with h/o surgery on cervix.

After getting informed consent, patients were enrolled for the study. After getting detailed history and general physical examination, gynaecological examination , then pap smear with visual inspection with acetic acid and lugol's iodine was carried out in all patients. All the patients were subjected to colposcopy, and then biopsy was taken.

RESULTS AND ANALYSIS

Higher incidence of CIN >80% is noted in age group more than 30. Higher incidence of CIN, about 89% is noted in the group, whose age of marriage is below 20. About 97% of cases have married life more than 15 years. Parity of 2 or more has higher incidence of about 92% CIN. 27% belong to socioeconomic status 5, 11% belong to SES 4. In biopsy 38% were diagnosed as CIN I, 5% CIN II, 3% CIN III and 2% invasive cancer. In pap smear, 37% belong to LSIL group, 6% belongs to HSIL group, 9% ASCUS group, 2% invasive cancer. When correlated with biopsy it shows 44% true positive, 1% false positive, 51% true negative and 4% false negative. In colposcopy, 40% were found to be CIN I, 12% belong to CIN II & CIN III, 2% invasive cancer. With histopathological correlation 46% cases were true positive, 6% were false positive, 46% true negative and 2% were false negative. In VIA/VILI, among the 100 cases, 56% were positive and 44% negative. When correlated with biopsy report, 45 cases were true positive, 11 cases were false positive. In the negative group, 41% were true negative, 3 cases false negative. Sensitivity and specificity of pap smear is 91.6% & 98%. Diagnostic accuracy is 95%. Sensitivity & specificity of colposcopy is 95% & 88%. Diagnostic accuracy is 92%. Sensitivity & specificity of VIA/VILI is 93.7% and 78.8%. diagnostic accuracy is 86%.

CONCLUSION

Colposcopy is the best screening tool with highest sensitivity. But need for expert made it difficult to implement in low resource settings. Till recently, all our screening programmes were Pap smear based and with the inherent difficulties in performing and interpreting Pap smear results in our set up, it was not surprising that these programmes could not give the expected results. Hence, the emphasis was shifted to visual inspection methods with acetic acid and Lugol's iodine. This method could sustain due to its simplicity and ease of performing in mass programmes. The other advantage with this method is that the results are available immediately thereby precluding with the need for the women to visit the health centers on more than one occasion. Moreover the specificity and sensitivity of these visual inspection based tests were also equally good 78% and 93 % respectively. Hence for resource restricted settings, VIA /VILI followed by colposcopy gives a much better results.

KEY WORDS: colposcopy, VIA VILI, pap smear, screening, cancer cervix, CIN.